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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,663	07/29/2005	Erting Hagen	04-985	7409
20306 7590 06/03/2008 MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP 300 S. WACKER DRIVE 32ND FLOOR CHICAGO, IL 60606				
EXAMINER NUTTER, NATHAN M				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
06/03/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/519,663

**Applicant(s)**

HAGEN ET AL.

**Examiner**

Nathan M. Nutter

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

In response to the amendment filed 9 April 2008, the following is placed in effect.

The objection to the disclosure, as requiring a substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b), is hereby expressly withdrawn in view of the Substitute Specification filed 9 April 2008, and indicated as "entered."

The rejection of claims 11 and 20-22 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is hereby expressly withdrawn.

The rejection of claims 11 and 20-22 rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, is hereby expressly withdrawn.

All other rejections are being maintained and the following new grounds of rejection and objection are being made.

### ***Claim Objections***

Claims 11 and 20-22 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. Claim 11 is drawn to a method of molding, yet depends improperly from claim 8, drawn to a composition

which was produced by the process of claim 1, from which claim 8 depends. Likewise, claims 20-22 are drawn to a method of molding, yet each depends improperly from composition claims. These claims cannot be construed as being further limiting.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 3-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claims 1 and 3-25 recite, as amended, "average molecular weight." There is no antecedent basis in the Specification, as originally filed for such limitation.

Claims 1 and 3-25 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for polypropylene polymers, does not reasonably provide enablement for any type of molecular weight measurement. The specification does not enable any person skilled in the art to which it pertains, or with which it is most

nearly connected, to make any use the invention commensurate in scope with these claims.

Case law holds that applicant's specification must be "commensurately enabling [regarding the scope of the claims]." See *Ex Parte Kung*, 17 USPQ2d 1545, 1547 (Bd. Pat. Appl. Inter. 1990). Otherwise **undue experimentation** would be involved in determining how to practice and use applicant's invention. The test for undue experimentation as to whether or not all compounds within the scope of claims 1 and 3-25 can be used as claimed and whether claims 1 and 3-25 meet the test is stated in *Ex parte Forman*, 230 USPQ 546, 547 (Bd. Pat. Appl. Inter. 1986) and *In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988). Upon applying this test to claims 1 and 3-25, it is believed that undue experimentation **would** be required because:

(a) *The quantity of experimentation necessary* is **great** since claims 1 and 3-25 read on any type of molecular weight such as "number average molecular weight," "weight average molecular weight," "z' average molecular weight," or "viscosity average molecular weight."

(b) There is **no direction or guidance presented** for making polypropylene polymers comprising any type of "average molecular weight."

(c) There is an **absence of working examples** concerning making polypropylene polymers comprising any type of "average molecular weight."

In light of the above factors, it is seen that undue experimentation would be necessary to make and use the invention of claims 1 and 3-25.

Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "average molecular weight" is not clear as to its proper metes and bounds. The claims recite "average molecular weight" without reciting what type of molecular weight, e.g. number average, weight average, "z" average or viscosity average, is contemplated. Since these values are variable for any given polymer, recitation of "molecular weight" by bare numbers is not clear and concise.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huovinen et al (US 6,503,993), Pitkanen et al (US 6,342,564) or Govoni et al (US 5,610,244).

Each of the references to Huovinen et al, Pitkanen et al and Govoni et al teach the manufacture of a polypropylene composition and molded articles produced therefrom using a process that may comprise a slurry polymerization step followed by two gas phase polymerization steps in sequence, as herein recited and claimed.

The patent to Huovinen et al shows the process steps at column 8 (lines 14 et seq.). note, further, the many Examples. At column 16, Example 8 (comparative), the reference shows specifically a high molecular weight fraction produced prior to a lower molecular weight fraction, as herein recited. The molecular weight of either phase may be controlled as disclosed by the reference, as herein claimed.

The reference to Pitkanen et al teaches the essential steps at column 3 (lines 54-60), column 4 (lines 5 et seq.) specifically referring to the control of the molecular weights of each polymerization phase through addition of hydrogen as being "conventional and ...readily applied by the person skilled in the art." Further, note the many Examples.

Govoni et al show the polymerization steps at Figure 2 and the descriptive text thereto at the paragraph bridging column 4 to column 5. The reference shows the use of molecular weight regulators at column 1 (lines 33-38), the final paragraph of column 2 and the many Examples.

The skilled artisan would have a high expectation of success to achieve the production of the polymer blends as herein recited following the steps disclosed in each reference, with the knowledge to control molecular weights in view of the Intended uses of the composition. Each is within the ordinary skill of an artisan. Nothing surprising or unexpected has been shown on the record.

***Response to Arguments***

Applicant's arguments filed 9 April 2008 have been fully considered but they are not persuasive.

With regard to the rejection of claims 1 and 3-25 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, the term "average molecular weight" is not a recognized art term. The term is only a partial term and not indicative of any particular type of molecular weight, as in number average molecular weight, weight average molecular weight, "z" average molecular weight or viscosity average molecular weight. Each of these measurements provides different results that are not interchangeable, but defined.

With regard to the rejection of claims 1 and 3-25 under 35 U.S.C. 103(a) as being unpatentable over Huovinen et al (US 6,503,993), Pitkanen et al (US 6,342,564) or Govoni et al (US 5,610,244), it is pointed out first that the rejection was made in the alternative, not the cumulative. As such, the references are not cited to "cure deficiencies" of a prior cited reference.

With regard to Huovinen et al, at column 8 (lines 41 et seq.) the reference teaches the choices of monomers, and then at column 8 (lines 56 et seq.) produces a polypropylene as the first polymer. As such, and given the level of skill in the art to manipulate monomers and the compositional limitations ascribed to each and to the polymers produced therefrom, a practitioner of ordinary skill would enjoy a high



expectation to arrive at the instantly claimed invention. The use of known constituents in known manner would yield predictable results. Nothing unexpected is seen on the record.

With regard to Pitkanen et al, the reference teaches a "propylene rich" polymer at column 3 (lines 49 et seq.). Given the level of skill in the art to manipulate monomers and the compositional limitations ascribed to each and to the polymers produced therefrom, a practitioner of ordinary skill would enjoy a high expectation to arrive at the instantly claimed invention. The use of known constituents in known manner would yield predictable results. Nothing unexpected is seen on the record.

With regard to Govoni et al, again, the choice of monomers, and their resultant polymers would be a design choice. The instant claims are drawn to a process. A skilled artisan would know to manipulate monomers and the polymers produced therefrom, and the compositional limitations of each for desired end-use applications. A practitioner of ordinary skill would enjoy a high expectation to arrive at the instantly claimed invention from the reference teachings. The use of known constituents in known manner would yield predictable results. Nothing unexpected is seen on the record.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 571-272-1076. The examiner can normally be reached on 9:30 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nathan M. Nutter/  
Primary Examiner, Art Unit 1796

nmn

31 May 2008